

## INTERNATIONAL SEARCH REPORT

PCT/IB2004/003570

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61B8/00 A61B8/06 G10K11/34

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B G10K G01S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | US 5 860 931 A (CHANDLER ET AL)<br>19 January 1999 (1999-01-19)<br>column 1, lines 28-30<br>column 2, line 65 - column 5, line 51<br>figures 2,5                            | 15-19                 |
| P,X        | WO 2004/041091 A1 (KONINKLIJKE PHILIPS<br>ELECTRONICS N.V; U.S. PHILIPS CORPORATION)<br>21 May 2004 (2004-05-21)<br>page 6, line 25 - page 13, line 15<br>figures 3,4,5A,5B | 15-19                 |
| X          | US 5 944 666 A (HOSSACK ET AL)<br>31 August 1999 (1999-08-31)<br>column 3, lines 6-51<br>column 5, line 47 - column 6, line 5<br>figures 2-4                                | 15-17,19              |
|            | -----<br>-/--   |                       |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

24 January 2005

Date of mailing of the international search report

31/01/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

W1111g, H

# INTERNATIONAL SEARCH REPORT

PCT/IB2004/003570

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
|--|--|-----------------------|
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages           | Relevant to claim No. |
| A  | US 6 340 348 B1 (KRISHNAN SRIRAM ET AL)<br>22 January 2002 (2002-01-22)<br>abstract<br>----- | 15-19                 |

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IB2004/003570

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-14  
because they relate to subject matter not required to be searched by this Authority, namely:  
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Continuation of Box II.1

Claims Nos.: 1-14

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

The methods claimed in independent claims 1 and 11 implicitly require the administration of an ultrasound contrast agent containing microbubbles to the living human or animal body. The administration of ultrasound contrast agents is generally performed by way of injection or infusion, for instance intravenously. The administration of the ultrasound contrast agent containing microbubbles is, therefore, considered a surgical step, by means of which the claimed methods as a whole are considered to be methods for treatment by surgery.

# INTERNATIONAL SEARCH REPORT

PCT/IB2004/003570

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s) |               | Publication<br>date |
|---|----|---------------------|----------------------------|---------------|---------------------|
| US 5860931                                | A  | 19-01-1999          | NONE                       |               |                     |
| WO 2004041091                             | A1 | 21-05-2004          | US                         | 2004092817 A1 | 13-05-2004          |
| US 5944666                                | A  | 31-08-1999          | AU                         | 9027598 A     | 08-03-1999          |
|   |    |                     | WO                         | 9908599 A1    | 25-02-1999          |
|   |    |                     | US                         | 5947904 A     | 07-09-1999          |
| US 6340348                                | B1 | 22-01-2002          | AU                         | 5902500 A     | 22-01-2001          |
|   |    |                     | WO                         | 0101865 A1    | 11-01-2001          |